



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Alytaus kolegijos

***KOMPIUTERINIŲ TINKLŲ ADMINISTRAVIMO  
PROGRAMOS (653E14003)  
VERTINIMO IŠVADOS***

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**EVALUATION REPORT  
OF COMPUTER NETWORK ADMINISTRATION  
(653E14003)**

**STUDY PROGRAMME**

at Alytus College

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Išvados parengtos anglų kalba  
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## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<b>Kompiuterinių tinklų administravimas</b>
Valstybinis kodas	653E14003
Studijų sritis	Technologijos mokslai
Studijų kryptis	Informatikos inžinerija
Studijų programos rūšis	Koleginės studijos
Studijų pakopa	Pirmoji
Studijų forma (trukmė metais)	Nuolatinė (3), iššęstinė (4)
Studijų programos apimtis kreditais	180
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Informacinių technologijų profesinis bakalauras, inžinierius
Studijų programos įregistravimo data	2007-04-25

## INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	<b>Computer Network Administration</b>
State code	653E14003
Study area	Technological Sciences
Study field	Informatics Engineering
Kind of the study programme	College studies
Level of studies	First
Study mode (length in years)	Full-time (3), part-time (4)
Scope of the study programme in credits	180
Degree and (or) professional qualifications awarded	Professional Bachelor of Information Technologies Engineer
Date of registration of the study programme	25/04/2007

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The Centre for Quality Assessment in Higher Education

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## I. INTRODUCTION

The Lithuanian Centre for Quality Assessment in Higher Education has invited four experts and one representative of students (hereinafter called Expert Team) from Estonia, Latvia, and Lithuania, to review and assess the Computer Network Administration professional bachelor study programme (653E14003) at the Alytus College (further AC). The programme is organized by the Faculty of Information and Communication Technologies (hereinafter called Faculty). Institutional structure of AC enables to involve required teachers from all the faculties and departments of AC.

The Expert Team visited the Faculty on September 20, 2012.

First, the Expert Team met the administrative staff represented by Director of the College Danute Remeikiene, Deputy Director for Strategic Development and Infrastructure Nerijus Cesiulis, Chief Accountant Dale Griškoniene, Head of Career and Public Relations Edita Klimavičiūtė, Head of Distance Learning Centre Dr. Rūta Petrauskiene, Head of Information and Self-study Centre Kristina Plitnikaite, Head of International Office Rozalija Radlinskaite. Overview of the College and its strategy were presented in very impressive way (e.g., Experts Team visit reflected in the College's newspaper and newsscreens, rich set of informative and promotional materials).

Next at the meeting with staff (11 persons) responsible for preparation of self-assessment the Expert Team was given good, clear and exhaustive answers to the questions concerning less uncovered issues in the self-assessment report.

After that, a meeting with 19 members of teaching staff took place.

The Expert Team conducted also interviews with some students. The group consisted of 12 students, all study years were represented. The Expert Team was familiarized with students' attitude towards the programme; the students actively expressed highly positive opinions about the study programme.

The Expert Team had possibility to observe various support services (class rooms, computer services, library, self-study centre, electronic publishing centre, sport hall, student parliament room) as well as to familiarize with students' course and final works.

Finally the Expert Team met 16 graduates and 18 social partners. They expressed a very positive attitude about the study program.

At the conclusion of the visit, the Expert Team conducted a meeting with staff of the Faculty and highlighted some strengths and weaknesses of the program under review.

The findings of the Expert Team are reflected in the following. The self-assessment report submitted by Faculty, the observations made at the time of the visit, and the supplementary material received during the visit form the basis of these assessments.

## II. PROGRAMME ANALYSIS

### *1. Programme aims and learning outcomes*

The programme aims and learning outcomes (further LO) are well defined, clear, and publicly accessible. However, there is no information about the program's aims and learning outcomes in English version of college website.

The programme aims and learning outcomes, generally, are based on professional requirements, public needs and the needs of the labour market. However, program's LO are not based on any normative or recommending document. Instead, they were developed by Alytus College and substantiated by regional poll of employers. The answers in affirmative were given by 50-62%, not very sound result. However, taking into consideration exceptionally high level of collaboration with social partners (local government and employers) such approach seems reasonable.

There is certain inconsistency between LO of subjects (study courses) and LO of the programme - LO in course description are not directly linked with LO of the programme. E.g., it is claimed (Self-assessment, 3 Table) that Mathematics contributes to the programme LO 3, 7, and 8. However, only one of course LO is clearly related to the programmes LO.

Nevertheless, the programme aims and learning outcomes are consistent with the type and level of studies and the level of qualifications offered.

The name of the programme, its learning outcomes, content and the qualifications offered are compatible with each other.

### *2. Curriculum design*

To the best of knowledge of the Experts Team, the curriculum design meets legal requirements set by Lithuanian authorities.

Study subjects and/or modules are spread evenly, their themes generally are not repetitive. However, subjects and themes sequencing is not clearly denoted (e.g., would be reasonable to supplement course descriptions with list of themes/courses that are mandatory before given course).

Up-to-date topics, such as "Virtualization", "Cloud computing" are not in the CNA programme subject contents (except in several items in additional literature list). These topics also not recognized by students, though there are final thesis related to those topics.

Outdated programming technologies taught (Delphi) - both student and graduate opinion.

The content of the subjects and/or modules generally is consistent with the type and level of the studies. However, some non-core subjects (e.g., Mathematics, Physics) do not contribute well to core subjects. E.g., it is highly questionable why computer networks administrator needs knowledge in molecular physics, atomic and nuclear physics, etc.

Some optional subjects are placed in the 1<sup>st</sup> semester, before students have got some experience useful for choosing specific subject.

The content and methods of the subjects/modules are appropriate for the achievement of the intended learning outcomes. However, the Experts Team is not sure that C++ (and even Java) is the best for the program. The students are taught only basic ideas related to programming (this is normal). Since they will not (and cannot, anyway) perform real programming (software engineering) after graduation, perhaps some other programming language could suit better (Python - simple for beginners, PHP - perhaps useful for them).

The scope of the programme is sufficient to ensure learning outcomes.

The content of the programme generally reflects state-of-the art in technologies, the latest achievements in science, art and technologies being an issue of higher level studies.

### *3. Staff*

The study programme is provided by the staff formally meeting legal requirements. However, there are less than 10% holders of a scientific degree teaching computing core subjects. Good tendency - 2 of teachers, teaching informatics subjects, recently defended doctor thesis (one in informatics, one in education).

The Expert Team have noticed weak knowledge of English of speciality subjects teachers and because of that only a small number of teachers (only 1) is participating in Erasmus exchange programme and have lectures in foreign countries.

During the meeting, teachers communicate and exchange information regarding the contents of their subjects very well. They are aware of the programme coordinators (heads of study committees). This fact indirectly substantiates that real coordination is in place.

There are good working conditions for teachers (rooms, workplaces for self-learning).

The qualifications of the teaching staff and the number of the teaching staff are adequate to ensure learning outcomes. However, more teachers at doctoral level would be useful. Teaching

staff turnover is not significant, so the staff is able to ensure an adequate provision of the programme.

The higher education institution creates conditions for the professional development of the teaching staff necessary for the provision of the programme. Staff members usually pass different courses every year. However, only one pursues doctoral studies.

The teaching staff of the programme is widely involved in research activities. Number of projects performed by the staff is impressive (more than 15 projects, more than 40 participations). However, the research mainly does not include core fields of computing, thus not being at doctoral level.

#### ***4. Facilities and learning resources***

The premises for studies are adequate both in their size and quality (almost 20 rooms for lecturing and self-learning, 5 laboratories). New facility has been reconstructed for the Faculty since previous accreditation.

The teaching and learning equipment (laboratory and computer equipment, consumables) are adequate both in size and quality. Computer laboratories very good, spacious.

List of software rather big (over 30 titles) in the self-assessment report, however, students specify only less than 25% as used in classes. Mainly mentioned design-related software. Practically no CNA-related software mentioned. Alumni mentioned the need to update software in labs.

Students could not mention a single English textbook they were using. Though, library has rather modern programme-related textbooks in its possessions.

The higher education institution has adequate arrangements for students' practice (there are more than 30 cooperation agreements with eventual internship providers and future employers).

Teaching materials (textbooks, books, periodical publications, databases), generally, are adequate and accessible.

#### ***5. Study process and student assessment***

The admission requirements are well-founded.

The organisation of the study process ensures an adequate provision of the program and the achievement of the learning outcomes. The students emphasise possibility of Erasmus exchange, friendly atmosphere, open teachers, active student parliament and entertainments, feeling like at

home, open administrative staff, teachers contactable also by phone and email, accessible databases, impact on practicalities.

Some subjects (Mathematics, Foreign language – full time studies; Programming – part studies) are studied through two semesters. Assessment form of 1<sup>st</sup> semester is credit and assessment form of 2<sup>nd</sup> semester is exam. In subjects' descriptions, is not mentioned what is the part of 1<sup>st</sup> semester assessment in the final mark of the subject.

Students are encouraged to participate in research, artistic and applied research activities. Facilities are richly decorated with students' artworks. The Expert Team had possibility to watch a short laser-show prepared by students. There is a special room devoted to generation of business ideas.

Students have opportunities to participate in student mobility programmes. However, few participate (1-2 annually in Erasmus).

The higher education institution ensures an adequate level of academic and social support (adaptation events for the entrants; updated information related to the studies, study plans, goals and objectives, outcomes and optional courses; consultation timetables; disabled and socially handicapped students can get financial support; etc.). However, there is no canteen in the new building.

The assessment system of students' performance is clear, adequate and publicly available.

Professional activities of the majority of graduates meet the programme providers' expectations.

Drop-out is surprisingly low (27%).

Asked for eventual improvements students also mentioned several things: lack of parking places near the Faculty, somewhere missing wireless internet, some computers are out of use, wishing to include CISCO Academy into the program, accessibility of library also from home, too few chairs in corridors, too small sport hall, too late (few days before) announcing of next semester schedule (part-time students), lack of leisure room in the Faculty, willing to use acquired laser equipment also in study process, wishing more literature in Lithuanian.

## ***6. Programme management***

Responsibilities for decisions and monitoring of the implementation of the programme are clearly allocated. Information and data on the implementation of the programme are regularly (at least once in semester) collected and analysed.

The outcomes of internal and external evaluations of the programme generally are used for the improvement of the programme. Regular self-assessment reports are written by teachers,



students are asked to fill-in questionnaires, visits to colleague's lectures also happen frequently, however, case-by-case. Consolidated reports are discussed at department and the Faculty level. The evaluation and improvement processes involve stakeholders. Some employers sitting on study committee and College Council claimed that their recommendations were implemented. The internal quality assurance measures are effective and efficient. Regular self-assessment reports are written by teachers, students are asked to fill-in questionnaires, visits to colleague's lectures also happen frequently, however, case-by-case. Consolidated reports are discussed at department and the Faculty level.

### III. RECOMMENDATIONS

1. Increase proportion of holders of scientific degree within teaching staff, especially in informatics core fields.
2. Supplement course descriptions with information on mandatory courses to be taken before the given one. Based on this check whether every course or part of it contributes to the program's learning outcomes.
3. Reconsider programming language to be taught for basics of programming.
4. Correct the study plan moving free optional subjects to later semesters.

#### IV. SUMMARY

Alytus College actively supports and implements the main strategy requirements of the rapidly developing knowledge society: to form new analytical abilities of trained specialists - perception and distinguishing of the essence and intensive thinking. The institution provides a specialist with higher non-university education being in permanent contact with the business and academic community of the Southern Lithuanian region and the country in realizing new scientific knowledge, applying modern information technologies and assuring effective study organization.

AC has good infrastructure and learning materials that are continuously improved, well-organized study process, highly motivated teachers and students, exceptionally strong collaboration with regional government and employers. The Experts Team acknowledges exceptionally strong AC management.

However, still there is a need to increase proportion of holders of scientific degree within teaching staff, especially in informatics core fields, and to supplement course descriptions with information on mandatory courses to be taken before the given one; based on this, to check whether every course or part of it contributes to the program's learning outcomes.

## V. GENERAL ASSESSMENT

The study programme *Computer Network Administration* (state code – 653E14003) at Alytus College is given **positive** evaluation.

*Study programme assessment in points by fields of assessment.*

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Staff	3
4.	Material resources	3
5.	Study process and assessment (student admission, study process student support, achievement assessment)	4
6.	Programme management (programme administration, internal quality assurance)	4
	<b>Total:</b>	<b>20</b>

\*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;

2 (satisfactory) - meets the established minimum requirements, needs improvement;

3 (good) - the field develops systematically, has distinctive features;

4 (very good) - the field is exceptionally good.

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